Appl. No. 10/668,147 Response to Office Action (September 26, 2005)

REMARKS

In the September 26, 2005 Office Action, claims 1-4, 6, 7, and 9-13 were rejected. This Response amends claims 1-3, 9, and 12-14 to clarify certain aspects of the recited material. After entry of the foregoing amendments, claims 1-4, 6, 7, and 9-13 (11 total claims; 3 independent claims) remain pending in the application. Reconsideration of the application is respectfully requested in view of the above amendments and the following remarks.

§102 Rejection

Claims 1-4, 9, 12, 13, 14, and 16 stand rejected under 35 U.S.C. §102(b/e) as being anticipated by Obeshaw, U.S. Pat. App. Pub. No. 2002/0006523 (hereinafter "Obeshaw"). Applicant respectfully traverses this rejection.

Obeshaw discloses a structural support member that contains a vibration damping mechanism (FIG. 1 and FIG. 12 of Obeshaw are representative of the disclosed structural support member). Notably, the Obeshaw structure is "non-flat" and it has a "closed surface configuration" where at least one portion of the surface is substantially closed or substantially continuous [Para. 0010]. This configuration is required to provide the necessary structural support. As shown in FIG. 1 and FIG. 12, the Obeshaw structural member includes an inner section 4 and an outer section 8, where the inner section 4 is physically and literally located inside the outer section 8. In addition, an intermediate section 6 is sandwiched between the inner section 4 and the outer section 8; this intermediate section 6 "supports, stabilizes, couples and attaches inner portion 4 with respect to outer portion 8" [Para. 0029]. Vibration damping layers 12 (see FIG. 12) may also be incorporated into the structural member.

The invention recited in independent claims 1, 9, and 14 is neither taught nor suggested by Obeshaw. In particular, claims 1, 9, and 14 call for a first and second <u>flat</u> outer face sheets, as described in Applicant's specification and as shown in Applicant's drawing figure. Moreover, claims 1, 9, and 14 recite a low density core material baving <u>flat and opposing</u> first and second sides, as described in Applicant's specification and as shown in Applicant's drawing figure. The flat sides of the low density core material mate with the first and second flat outer face sheets. Indeed, the term "face sheet" refers to the outer "skins" of the fairing panel in Applicant's example embodiment. In contrast, the Obeshaw structural member forms a "beam" or a "column" having a round, square, polygonal, or non-flat cross section. Applicant notes that

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the flat material shown in Obeshaw's FIG. 2 merely represents the material layers prior to rolling or forming into the various cross sectional topologies shown in Obeshaw. In other words, Obeshaw does not teach or suggest a flat panel having two opposing and flat outer face sheets as claimed. In fact, Obeshaw teaches away from such a configuration.

For at least the above reasons, independent claims 1, 9, and 14 (and all associated dependent claims) are not anticipated by Obeshaw and Applicant requests the withdrawal of the §102 rejection of claims 1-4, 9, 12, 13, 14, and 16.

§103 Rejection

Claims 6, 7, and 10 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Obeshaw. Applicant respectfully traverses this rejection.

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation to modify a reference or to combine the teachings of multiple references. Second, there must be a reasonable expectation of success. Third, the prior art must teach or suggest all of the recited claim limitations. Of course, the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in Applicant's disclosure. For the reasons discussed in the previous section, Applicant respectfully submits that the Examiner has not met all of the above criteria. In particular, Obeshaw does not teach or suggest all of the recited claim limitations.

Furthermore, one skilled in the art would not be motivated to modify Obeshaw to create a structure as recited in Applicant's claims. As discussed above, the Obeshaw structural member is specifically designed as a longitudinal support member (the cross sectional topology of the Obeshaw structural member is critical to its functionality as a support "beam" or "column") and, therefore, it must utilize a non-flat closed surface configuration. Consequently, Obeshaw teaches away from a structure that includes two flat opposing outer face sheets as recited in Applicant's claims.

For at least the above reasons, claims 6, 7, and 10 are not unpatentable over Obeshaw, and Applicant requests the withdrawal of the §103 rejection of those claims.

In conclusion, for the reasons given above, all claims now presently in the application are believed allowable and such allowance is respectfully requested. Should the Examiner have

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any questions or wish to further discuss this application, Applicant requests that the Examiner contact the undersigned attorney at (480) 385-5060.

If for some reason Applicants have not requested a sufficient extension and/or have not paid a sufficient fee for this response and/or for the extension necessary to prevent abandonment on this application, please consider this as a request for an extension for the required time period and/or authorization to charge Deposit Account No. 50-2091 for any fee which may be due.

Respectfully submitted,

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Dated: November 23, 2005

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